Loop Qualification System (LQS)

DLEC/CLEC Job Aid

(Issue 1, October 16, 2000)

Chapter 1.0: Introduction

1.1 Purpose and Scope

This job aid is provided to assist the voice and/or data Competitive Local Exchange Carrier (D/CLEC) in translating the results returned when accessing BellSouth's Loop Qualification System (LQS).

LQS functions as a tool for BellSouth customers (retail; purchasers of BellSouth's Asymmetrical Digital Subscriber Line (ADSL) service and D/CLECs to determine whether a particular service location meets certain technical criteria and as such is qualified for *BellSouth's ADSL offering based on BellSouth's technical parameters*. For further specifications on the BellSouth ADSL offering, refer to the **BellSouth Access Tariff - F.C.C. No. 1**.

While the information returned via LQS may provide some indication of loop characteristics, it does not provide the level of detailed information that mechanized or manual Loop Makeup (LMU) provides. For more information on BellSouth's Loop Makeup product, refer to the BellSouth LMU CLEC Information Package located at the BellSouth Interconnection Services Web site in the CLEC Products Section at:

http://www.interconnection.bellsouth.com/products/unes.html

1.2 Disclaimer Statement

The information contained in this job aid is subject to change. BellSouth will provide notification of changes through the Carrier Notification Process.

1.3 Version History/Control

Section	Date/Issue	Description
All	10/16/00 – Issue 1.0	Initial Issue Release

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Chapter 2.0: LQS Overview

The Loop Qualification System (LQS) described in this job aid is for Data Local Exchange Carriers (DLECs)/Competitive Local Exchange Carriers (CLECs) hereafter referred to in this document as D/CLEC, to utilize when accessing BellSouth's LQS. This job aid, along with the information found on the LQS web site, is intended to support the use of LQS by the D/CLEC communities. The web address is:

HTTP://LQS.BELLSOUTH.COM

LQS, also referred to as "Loopy", was originally designed as an internal tool utilized by BellSouth and Internet Service Providers (ISPs), reselling the BellSouth ADSL service, to determine if a telephone number(s) at a specific service address qualified for BellSouth Asymmetrical Digital Subscriber Line (ADSL) Service. Subsequently, LQS access has been made available to any requesting D/CLEC via the Interconnection Agreement.

A user can perform an on-line query on up to five manually entered telephone numbers at a time. The current offering limits a user ID to 2,000 qualifications in a 24-hour period. A user can also submit up to 1,000 numbers at once using the ***Bulk Submit*** utility to submit an ASCII file. The 2,000 limitation also applies to bulk submissions. For additional information on establishing LQS access see **Section 3.4 How to Establish/Discontinue Access to LQS**. For additional information on installing and logging onto LQS see **Section 4.0 Setting Up and Using LQS**.

The information contained in LQS is derived from the Loop Engineering Assignment Data (LEAD) database and provides a "best effort" response regarding a loop's ability to support BellSouth's ADSL service. The information contained in LQS is derived from the Loop Engineering Assignment Data (LEAD) database, a once-per-month-per-wire-center "snapshot" of the information contained in the Loop Facilities Assignment and Control System (LFACS) database. 1/30th of all wire centers is updated every day. Currently there is a 90% accuracy rate on returned responses within LQS. Therefore, LQS cannot be guaranteed based solely on the system response. Guaranteed service of BellSouth's Business Class ADSL does not utilize LQS but instead requires a manual Service Inquiry (SI).

Chapter 3.0: General Guidelines

3.1 Availability

LQS is available to any D/CLEC via the appropriate interconnection agreement amendment. See **Section 3.4, How to Establish/Discontinue Access to LQS,** for specific instructions on gaining access to LQS.

3.2 Contract Specific Guidelines

For LQS access to be provided the D/CLEC must have an Interconnection Agreement that includes the terms and conditions for the service.

If a D/CLEC requests access to LQS and such access is not already covered by the existing Interconnection Agreement, the contract negotiator should be contacted to provide the appropriate amendment.

3.3 Billing

There is no charge at this time associated with using LQS. The only expense incurred by the D/CLEC is the communications access.

3.4 How to Establish/Discontinue Access to LQS

Once authorized via the interconnection agreement amendment, the D/CLEC should contact their Account Team representative to obtain access to LQS. The D/CLEC provides the Account Team representative with the following information:

1. User Name (8 character field)
2. Password (8 character field)

(The D/CLEC is responsible for formatting each of these)

The Account Team representative will notify the D/CLEC when the access is established. A minimum of five (5) business days should be allowed to establish access. The Account Team representative should also be contacted if it becomes necessary to disable the password and delete the account.

Chapter 4.0: Setting Up and Using LQS

4.1 Installing the LQS Application

The following steps should be taken to install LQS:

- Via your Internet browser, type in the URL address http://lqs.bellsouth.com
- Enter your User Name and Password
- From the Science and Technology ADSL Loop Qualification System (LQS) Home Page, select the applicable PC-based Graphical User Interface (GUI)
- Follow the installation procedures provided for the GUI selected

4.2 Logging Onto LQS

The following steps should be taken to log onto LQS:

- Double click the BellSouth Loop Qualification icon on the PC Desktop (the LQS Login box will appear)
- Enter your User Name and Password
- The BellSouth LQS Status window will appear

4.3 Making Loop Queries

Queries are available through two methods:

1. LQS Status window, used to query up to five telephone numbers
2. Bulk Submit Utility, used to query up to 1,000 telephone numbers

4.3.1 LQS Status window method

The BellSouth LQS Status window allows the user to obtain status on up to five 10-digit telephone numbers.

- Enter the 10 digit telephone number(s), excluding hyphens
- Click the Get Status button
- The status information on each number entered will appear

For information on interpreting the status, see **Section 5.0 LQS Query Results**.

Continued on next page

4.3 Making Loop Queries, continued

4.3.2 Bulk Submit Utility method

The Bulk Submit Utility allows users to submit up to 1,000 telephone numbers at one time directly from the PC. The telephone numbers must be contained in an ASCII file format, with one 10-digit number per line excluding hyphens, and no titles, headers or footers.

To perform a Bulk Submit, from the BellSouth LQS Status window:

- Select Utilities on the menu bar
- Select Submit Bulk File
- Select the file containing the telephone numbers

When finished the LQS Bulk File Results window will display showing the status for all the telephone numbers contained on the bulk file. The user can select and copy the contents to another document or save to a new file.

For information on interpreting the status, see **Section 5.0 LQS Query Results**.

Detailed information on the BellSouth LQS application is available at:

http://lqs.bellsouth.com/Application.html

Chapter 5.0: LQS Query Results

5.1 Query Results

The **External Reason Code** displayed for each number queried is either ***available (A), planned (P)*** or ***not qualified (N)*** and ***copper (C)*** or ***fiber (F)***.

The **Internal Reason Code** displayed for each number queried is viewable via the drop down arrow and indicated with a **+** sign to indicate that additional information is available.

5.2 Positive Response Results

The following table shows the possible External and Internal Reason Codes for positive response results returned from LQS:

External Reason Codes	Internal Reason Codes
A, C	IQ1, Copper-qualified loop IQ2, PairGain loop qualified with copper-qualified cross-box (requires cut-over) IQ3, PairGain loop qualified through BellSouth Remote Digital Subscriber Line Access Mulitplexer (DSLAM). CAUTION: See note below for this code. IQ4, PairGain loop qualified through BellSouth mini-RAM. CAUTION: See note below for this code. IQ6, F1 Loaded loop qualified with copper-qualified cross-box (requires cut-over) IQ7, Loop currently has ADSL
A, F	IQ5, Qualified through CMS update IQ8, Qualified through LL Update
P, C, Date	Planned for service on Copper
P, F, Date	Planned for Service on Fiber (IQ5, Qualified through CMS update)

The Internal Reason Codes are explained on the next page.

Chapter 5.0: LQS Query Results

5.2 Positive Response Results, continued

The following is an explanation of the Internal Reason Codes:

IQ1, Copper-qualified loop
- This copper loop does qualify for ADSL service.

IQ2, PairGain loop qualified through copper-qualified cross-box
- This customer is currently served via Digital Loop Carrier (DLC) that will not support ADSL service. However, records indicate 10 or more qualified copper pairs do exist at the cross-box. A Facility Reservation Number (FRN) must be obtained by the CLEC in order to move the customer to an unloaded copper pair suitable for Line Sharing.

IQ3 and IQ4, Qualified through Remote Solution
- This response code means that BellSouth has an existing remote solution (Remote DSLAM or mini-ram) available in the Remote Terminal (RT) in which this customer gets their voice service.

NOTE: Due to the proactive logic in LQS, this code does mask any other codes about the loop currently serving the customer. The only valid assumption would be that the F2 portion of this customer loop is qualified for an ADSL-type of service.

IQ5, Qualified through CMS Update
- This response code means that BellSouth has an existing or planned Integrated Fiber in the Loop (IFITL) remote solution serving this customer.

IQ6, F1 Loaded loop qualified through copper-qualified cross-box
- This customer is currently served via a loaded copper pair that will not support ADSL service. However, records indicate 10 or more qualified unloaded copper pairs do exist at the cross-box. A Facility Reservation Number (FRN) must be obtained by the D/CLEC in order to move the customer to an unloaded copper pair suitable for Line Sharing.

IQ7, Loop currently has ADSL
- This customer currently has BellSouth ADSL service.

IQ8, Qualified through LL Update
- This response code means that BellSouth has an existing IFITL remote solution serving this customer which is capable of carrying ADSL service.

Chapter 5.0: LQS Query Results

5.3 Not Qualified Response Results

The following chart shows the available External and Internal Reason Codes from LQS when a loop is not qualified:

External Reason Codes	Internal Reason Codes
E0 – Request ignored – file size limit	Same
E1 – Syntax error in phone number	Same
E2 – Service is not available for this Phone number	I1: Copper loop with RZ>13 I2: Copper loop is loaded I3: Copper loop has Digital Added Main Line (DAML) I5: Taper code is a dead zone I6: Loop has DAML I7: FN is loaded I9: Terminal CZ > 9 I10: Existing service category not compatible I11: Phone number is foreign exchange I12: Taper code exceeds distance limit (F1+F2=Total) I13: NPA-NXX is not found
E3 – Loop currently unqualified. Please try again later	I4: Pair gain loop with no Remote DSLAM I8: Wire center not DSLAM-equipped
E4 – No longer used	Same
E5 – No longer used	Same
E6 – Loop is not found. Please try again later.	Same

Listed on the following page are explanations of why you might receive the error codes above.

Chapter 5.0: LQS Query Results

5.3 Not Qualified Response Results, continued

Explanations why the error codes may be returned:

E2 - "Service is not available for this phone number"

- Internal codes I1, I9 and I12
  - The loop is too long to support ADSL.
    I1: overall loop resistance > 1300Ω.
    I9: Carrier Zone > 900Ω.
    I12: CO to X-box distance + Average distance of taper code pair to X-box > 18 kf.
    I12 Example: Taper code exceeds distance limit (13.27+6.1=19.37).
    In this example: F1 length is 13.27 kf; Average length of taper code pair is 6.1 kf; Total is 19.37 kf.
- Internal codes I2 and I7
  - The loop contains one or more load coils.
- Internal codes I3 and I6
  - The phone number is on a Digital Added Main Line (DAML).
- Internal code I5
  - The customer falls within a known "dead" zone, an area flagged by maintenance personnel where ADSL is known not to work.
- Internal code I10
  - The line is not POTS or plain Centrex.
- Internal code I11
  - The phone number is a Foreign Exchange/Foreign Central Office (FX/FCO) line.
- Internal code I13
  - The NPA-NXX belongs to one customer (e.g. a University) and all numbers in the range are PBX DID or Primary Rate ISDN numbers, OR
  - The NPA-NXX belongs to a CLEC.

E3 - "Loop currently unqualified. Please try again later"

- Internal code I4
  - The loop is behind a digital loop carrier system.
- Internal code I8
  - This central office is not equipped with a BellSouth DSLAM.

E6 - "Loop is not found. Please try again later."

- The phone number is on an ISDN line.
- The phone number is newly installed and not yet in LQS.
- The phone number is a direct inward dialing number (DID) behind a PBX.
- The phone number is served via Primary Rate ISDN.
- The phone number may belong to a facilities-based CLEC and is outside of BellSouth's network.

Chapter 5.0: LQS Query Results

5.4 Important Notes on the Logic Sequence of LQS

LQS stops the search and logic routines when it finds the first error condition and reports that error code. It does not continue and find all possible error codes.

The following list shows the error checking sequence used by LQS:

Item	Output upon Error Found
1) Check for proper input.	E1: Syntax error in phone number
2) Check for existence of NPA-NXX	E2: Service not available/ I13: NPA-NXX not found
3) Check for existence of loop in database	E6: Loop not found. Please try 24 hours later.
4) Check for FX Service	E2: Service not available/ I11: Foreign Exchange
5) Check for incompatible services	E2: Service not available/ I10: Existing Service category not compatible
6) Check if Remote Solution exists: If Remote Solution exists, check copper F2 for: a) Loading	E2: Service not available/ I7: FN is loaded
b) Presence of DAML	E2: Service not available/ I6: Loop has DAML
c) Carrier Zone > 900 Ω	E2: Service not available/ I9: Terminal CZ>9
If NO remote solution exists: Check for copper, then DLC.	
7) Check for loaded copper pair	E2: Service not available/ I2: Copper loop is loaded
8) Check for DAML presence	E2: Service not available/ I3: Copper loop has DAML
9) Check for RZ code	E2: Service not available/ I1: Copper loop RZ>13

Continued on next page

Chapter 5.0: LQS Query Results

5.4 Important Notes on the Logic Sequence of LQS, continued

The following list shows the error checking sequence used by LQS: continued

Item	Output upon Error Found
10) Check for DLC presence	E3: Loop currently unqualified, please try again later/ I4: PairGain loop with no Remote DSLAM
11) Check taper code for dead zone	E2: Service not available/ I5: Taper code is dead zone
12) Check taper code length	E2: Service not available/ I12: Taper code distance
13) Check for BellSouth DSLAM	E3: Loop currently unqualified/ I8: Wire center not DSLAM-equipped

(End of logic)

Since LQS performs the check for the presence of a BellSouth DSLAM last, if LQS shows the error "The central office is not equipped with ADSL", the loop can be assumed, but not guaranteed, to be qualified.

If LQS finds the existence of a BellSouth Remote Solution, most of the data about the loop is ignored except for F2 qualifications. Therefore, if LQS shows the response "Qualified Through Remote Solution", only the F2 portion of the loop can be assumed to be qualified. Typically, these serving arrangements will not have copper pairs available. A Manual Loop Makeup needs to be requested in these situations to determine if any copper pairs exist at the remote terminal site.

Numbers not having an LFACS cable pair assignment, such as the phone in a Collocation space, will not show up in LQS.

LQS stops the search and logic routines when it finds the first error condition and reports that error code. It does not continue and find all possible errors.

BellSouth Loop Makeup (LMU)

CLEC
Pre-Ordering and Ordering Guide
For
Manual Loop Makeup

(Issue 1.0 September 15, 2000)

1.1 Purpose

This document provides the Competitive Local Exchange Carrier (CLEC) with the current Unbundled Network Element (UNE) Pre-Ordering and Ordering information pertaining to BellSouth *Manual* Loop Makeup (LMU). This document serves as a supplement to the CLEC Information Package (Version 2) of BellSouth Loop Makeup (LMU), with a posting date of *09/15/00*.

The BellSouth LMU CLEC Information Package (Version 2) is located at the BellSouth Interconnection Services Web site in the CLEC Products Section at:

http://www.interconnection.bellsouth.com/products/UNE/bstlmu.pdf

1.2 Disclaimer Statement

The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the CLEC Notification Process.

This guide will be maintained until such time that it's content is incorporated into the BellSouth Business Rules – Local Ordering (BBR-LO). The BBR-LO is found at:

http://www.interconnection.bellsouth.com/guides/leo.html

1.3 Version History / Control

Any future modifications, enhancements, and/or improvements that are made to this Pre-Ordering and Ordering Guide for BellSouth *Manual* Loop Makeup (LMU) will be reflected accordingly in this section of the document.

Section	Date / Issue	Description
ALL	09/14/00 – Issue 1.0	Initial Issue Release

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3.1 Manual LMU Overview

Manual Loop Makeup (LMU) is requested via the ***Manual Loop Makeup Service Inquiry (LMUSI)*** process.

Manual LMU can be requested for either a working facility or for spare facilities using the following rate elements per Manual LMUSI:

USOC	Rate Element
UMKLW	MANUAL Loop Makeup - Preordering Without Reservation, per working facility queried
UMKLW	MANUAL Loop Makeup - Preordering Without Reservation, per spare facility queried [Maximum No. of Spare Facilities per Manual LMUSI is (3)]
UMKLP	MANUAL Loop Makeup - Preordering With Reservation, per spare facility queried [Maximum No. of Spare Facilities per Manual LMUSI is (3)]

BellSouth's provision of loop data to the requesting CLEC on working facilities is contingent upon ownership considerations of the loop, whether by BellSouth or the requesting CLEC. The requesting CLEC is not authorized to receive loop data on a loop owned by another CLEC.

Manual LMU of Spare Facilities may be requested With or Without Reservation. When the CLEC requests Manual LMU of Spare Facilities With Reservation, a Reservation ID is returned with the LMU information. The reservation ID is also known as a Facilities Reservation Number (FRN). Hereafter within this document, this code will be referred to as the "RESID/FRN".

The reservation holding timeframe is a maximum of four days from the time that BellSouth's loop makeup data is returned to the CLEC on the facilities queried. During this holding time that a Service Order is not placed, the reserved facilities are rendered unavailable to other customers, whether for CLEC(s) or for BellSouth. Reserved facilities for which the CLEC does not plan to place a UNE service order should be cancelled by the CLEC in a timely manner.

4.1 Availability

BellSouth will offer this product in all states within the BellSouth Region.

Per Manual LMUSI request, the CLEC may inquire for Manual Loop Makeup information on a

- single working facility, or
- maximum of three spare facilities

The **STANDARD SERVICE INTERVAL** for return of a response to Manual LMUSI is seven business days. This **STANDARD SERVICE INTERVAL** is a target interval. The interval is calculated from 'Receive Date' to 'LMU Return Date', and includes the time to render the Firm Order Confirmation (FOC). The FOC is rendered upon the issuance of the Billing Service Order. 'Receive Date' is defined as the date the Manual LMUSI is received by the designated BellSouth Account Team representative, and is counted as Day Zero. 'LMU Return Date' is defined as the date the LMU information is returned to the CLEC from BellSouth. The Interval calculation is reset to Zero when a CLEC initiated change occurs on the Manual LMU request. For a BellSouth initiated clarification to the CLEC to obtain correct information from the CLEC on its LSR, there may be a delay beyond the standard service interval in the return of a response to a Manual LMUSI request.

4.2 Contract Specific Provisions

Before a Loop Makeup Service Inquiry (LMUSI) may be submitted by the CLEC, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for the LMUSI(s) being requested. For more information on Contract Specific Provisions, refer to the BellSouth LMU CLEC Information Package.

4.3 Billing Information

Manual LMU will be billed from the Carrier Access Billing System (CABS) on a 'C' Billing Account Number (BAN). All activities herein described and associated with a unique Uniform Service Order Code (USOC) will incur a unique nonrecurring charge.

5.1 Description of Ordering Process

The following points describe the high level Manual LMU Order Process Flow. Detailed information is presented within this Chapter in the Sections that follow.

To Request Manual LMU:

1. CLECs request manual loop makeup information by submitting a Firm Order *Manual* Loop Makeup Service Inquiry (LMUSI) and a Local Service Request (LSR) form to the Complex Resale Support Group-UNE Group (CRSG), or to their direct Account Team for those CLECs not supported by the CRSG. Hereafter within this document, the use of "CRSG/Account Team" refers to both the CRSG-UNE Group and the direct Account Team, which ever is applicable.

NOTE: For those CLECs supported by the CRSG, refer to Chapter 7.0: Guidelines for Interfacing with the CRSG UNE Group.

2. The CRSG/Account Team submits the LMUSI to the geographically appropriate Service Advocacy Center (SAC).

3. The SAC specialist prepares the LMU as specified on the LMUSI and returns the LMU, and the Facility Reservation (RESID/FRN), if requested, to the CRSG/Account Team.

4. The CRSG/Account Team sends the LMUSI and LSR to the Local Carrier Service Center (LCSC) for Billing Service Order issuance.

5. The LCSC issues the Billing Service Order for the Manual LMU.

6. The LCSC renders the Firm Order Confirmation (FOC).

7. Once the FOC has been rendered, the CRSG/Account Team returns the LMU and the RESID/FRN, if applicable, to the CLEC.

Continued on next page

5.1 Description of Ordering Process

Continued from previous page

To Cancel Reservation(s):

1. To cancel a reservation on spare facilities, the CLEC submits the LMUSI form to the CRSG/Account Team with the Cancel FRN item indicated.

2. The LSR form is not required.

3. The CRSG/Account Team sends the Cancel FRN LMUSI to the SAC.

To Cancel Pending LMUSI:

1. To cancel a pending Manual LMUSI, for which no Loop Makeup information has been processed, the CLEC submits the LMUSI form to the CRSG/Account Team with the Cancel LMUSI item indicated.

2. The LSR form is not required.

3. The CRSG/Account Team sends the Cancel LMUSI to the SAC.

5.2 Submitting a Request

For a *Manual* Loop Makeup request, the CLEC prepares and submits the

- Local Service Request (LSR) Form, Local Service Ordering Guidelines Version 4 (LSOG 4) or later, and
- Loop Makeup Service Inquiry (LMUSI) Form (click Here to download!)

A copy of the LSR Form is available at the BellSouth Interconnection Services Web site in the CLEC Customer Guides Section at:

http://www.interconnection.bellsouth.com/guides/bst_lsog4.html

A copy of the LMUSI Form is located at the end of this Guide.

Both forms must be typewritten.

The CLEC submits the LSR and the LMUSI forms together to the CRSG/Account Team for processing. See Chapter 7.0: Guidelines for Interfacing with the CRSG UNE Group of this Guide when submitting requests to the CRSG.

For a working pair LMUSI, the end user's address will be required along with either the telephone number or the circuit ID (CKID).

For spare facilities LMUSI, only the address of the service location is required.

5.3 Manual LMUSI Instructions

Instructions for preparing the LMUSI Form follow. The instructions are organized by Section, by field.

The LMUSI is a two-page form. Page 2 is only required if LMU is being requested for more than one facility. A maximum of three facilities may be requested for a single service address per LMUSI request.

The form MUST be typewritten. Unless otherwise noted, there are no restrictions regarding length of fields or alpha/numeric makeup of required information.

Section: "General Information "

Field	Instruction
Firm Order	Select for initial request
Cancel LMUSI	Select to cancel pending LMUSI for which LMU has not yet been processed
Cancel FRN	Select to cancel RESID/FRN for pair(s) previously reserved
Change	Select to update a pending Firm Order request
SI# (PON Number)	Enter the CLEC unique Purchase Order Number (PON). This entry always required.
Negotiator	Refers to the BellSouth CRSG/Account Team Representative Name
Negotiator's Tel Number	Refers to the BellSouth CRSG/Account Team Representative TN

NOTE: the reference "CRSG EMAIL ADDRESS: (CRSG UNE/m5,mail5a)" is for BellSouth use.

Section: "Customer Information"

Request Options: Select *Only* One of the Three Choices

1. Provide LMU at Telephone Number/CKID
2. Provide LMU at specified address for spare copper pair (loop facility)
3. Provide LMU at specified address for spare Digital Loop Carrier (DLC) pair

If Selected	Then Provide	
LMU for working facility	Telephone number, or, Circuit ID (CKID)	
LMU for spare copper pair	Number of spare pairs required – Maximum 3	Reserve Pair(s)? **YES / NO**
LMU for spare DLC pair	Number of spare DLC pairs required – Maximum 3	Reserve Pair(s)? **YES / NO**

NOTE If Spare Facility(-ies): CLECs cannot request a mixture of copper and DLC pairs on a single LMUSI spare facility request. CLEC should provide a Y/N response regarding its choice for a reservation of the facility queried.

Continued on next page

5.3 Manual LMUSI Instructions

Section: "Customer Information", continued from previous page

Field	Instruction
Service Address	Enter the Local Exchange Navigation System (LENS), Telecommunications Gateway (TAG), or RoboTAG™ validated Service Address. Include any dept/floor/suite/room/apartment number, as well as, the U.S. postal zip code. This entry always required.
CLEC Company Name	Enter the requested information. This entry always required.
CLEC Contact/Tele No.	Enter the requested information. This entry always required.
Local Serving Central Office Common Language Location Identifier (CLLI)	Enter the eight character Serving Wire Center CLLI code. This entry always required.

Section: "Comments"

This section is always required with ***Cancel FRN***.

Enter the FRN and Cable/Pair information for the reservation being cancelled.

5.4 Manual LSR Instructions

Instructions for preparing the Manual LSR Form follow. The instructions are organized by Section, by field.

Only the sections and fields specified herein (rather than the entire LSR Form) are required for purposes of processing a Manual LMUSI.

The form MUST be typewritten, using the LSOG 4 Version form. Please note specifications on length and alphalnumeric makeup of required information.

Section: "Administrative Section"

Field	Instruction
CCNA	Enter the 3 Alpha Character Code Assigned to CLEC
PON	Enter the CLEC unique PON – MUST match SI# (PON) field of associated LMUSI
VER	Will be populated if sending a SUPP
LOCQTY	Enter the number of Loop Makeups being requested
SC	Always **LCSC**
PG OF	Enter the requested information
D/TSENT	Enter the requested information
DDD	Enter the requested information
REQTYP	Always **AB**
ACT	Always **N**
SUPP	Will be populated if sending a SUPP
CC	Enter the 4 character Numeric Code Assigned to CLEC
ACTL	Enter the CLEC 11 character CLLI code for the Serving Wire Center (SWC), where CLEC is physically or virtually collocated in BellSouth SWC
TOS	Always **1BF**

Section: "Bill Section"

Field	Instruction
BAN1	Enter the established "C" BAN, or, "N" if BAN is not established. See ***NOTE*** below regarding "C" BAN
ACNA	Enter the 3 Alpha Character Code Assigned to CLEC

NOTE: If the CLEC does not have an established "C" BAN, populate this field with an "N" and the Local Carrier Service Center (LCSC) Service Representative will establish the "C" BAN for the CLEC. (See procedures below for how to establish a "C" BAN)

Continued on next page

5.4 Manual LSR Instructions

Section: "Bill Section", continued from previous page

Procedures for Establishing "C" BAN: The fields listed below are required in order to establish a "C" BAN for the CLEC. If the CLEC's "C" BAN is already established, and thus, the CLEC populates this in the "BAN1" field on the LSR form, then the CLEC will not need to fill in the fields below.

Field	Instruction
BILLNM	Enter CLEC Company Name
STREET	Enter the requested information
FLOOR	Enter the requested information
ROOM	Enter the requested information
CITY	Enter the requested information
STATE	Enter the requested information
ZIP CODE	Enter the requested information
BILLCON	Enter Contact at CLEC
TEL NO	Enter the requested information

The CRSG/Account Team will check the LSR form to insure that the "BAN1" field is populated with either a "C" BAN number, or, an "N", the latter of which would prompt the LCSC to establish a "C" BAN for the CLEC. If the "BAN1" field is not populated, then the CRSG/Account Team will clarify the LSR and LMUSI, returning both manual forms back to the CLEC for completion.

If a "C" BAN is established for the CLEC, it is returned via the FOC.

Section: "Contact Section"

Field	Instruction
FAX NO	Enter the FAX number where Firm Order Confirmation (FOC) is to be sent by the LCSC
INIT	Enter Name of person at CLEC who initiated LSR
TEL NO	Enter Telephone number of CLEC Initiator

A Reminder When Filling Out the LSR: If a CLEC is sending in an LSR for purposes of a Supplement (SUPP), then the CLEC must populate the "VER" and "SUP" fields on the LSR, business as usual (BAU).

5.5 The LMUSI Response

Information presented on the LMUSI Response is as follows.

Section: "Outside Plant Engineering Makeup Data (N_{th}) Requested Pair"

If LMU was requested on a working Telephone Number/Circuit ID, Outside Plant Engineering (OSPE) will fill in the Cable and Pair numbers, and list the loop makeup of that Cable and Pair facility.

If spare facilities were requested and are available, Outside Plant Engineering (OSPE) will fill in the Cable and Pair numbers; will populate the FRN if a reservation was requested by the CLEC; and list the loop makeup of that Cable and Pair facility.

If spare facilities are not available, or if the number of pairs available is less than the number requested, OSPE will indicate in the **Comments** section no spare pairs are available or that only some of the pairs are available.

5.6 The LMU Content

Loop Makeup Data is defined as the physical characteristics of the loop facilities, starting at the BST central office (CO) listed in chronological order and ending at the serving distribution terminal. Loop makeup data will consist of cable gauge and length, bridged taps (BT), load coils (LC), presence of Digital Loop Carrier (DLC) and any other equipment that is part of the local loop facilities.

The loop makeup will be listed as cable sections (e.g., F1, F2, etc.) on the LMUSI response in chronological order starting at the CO and ending at the end user serving terminal. Each section of cable (F1, F2, etc.) is distinguished by the presence of a crossbox, as indicated by an X at the appropriate point within the loop makeup response. (For example: Cable F1 would run from the CO to the first cross box; Cable F2 would run from the first crossbox to the second cross box or to the end user's serving terminal.) Facility cable sections will include the cable gauge, the length of the cable, as well as any load coils and bridged taps contained within that cable section. Length is measured in kilofeet ("kft"). The location of load coils will be indicated by the code "LC"; bridge tap will be indicated by the code "BT". The LMU response will also include the length of the bridge tap. If the loop makeup includes DLC the type of DLC will be indicated.

An example of a loop makeup response is as follows:

26NL - 10 kft	(The first facility cable section, F1, is non-loaded 26 gauge)
BT; 26NL - 2 kft	(F1 also includes BT at the end of 10 kft; the BT is 26 gauge for 2.0 kft)
X	(Location of first crossbox; thus, F1 length is a total of 12 kft)
26NL - 2 kft	(The second facility cable section, F2, is non-loaded 26 gauge)

The total length of the facility in this example would be 14 kft. Responses for manual loop makeup will be provided in a similar fashion.

Continued on next page

5.6 The LMU Content

Continued from previous page

Use the following key to interpret the information returned on the loop makeup:

Code	Description
26NL 24NL 22NL 19NL	Indicates a section of 26-gauge cable non-loaded. The other gauges are listed similarly. Changes to the numbers indicate the gauge (24NL, 22NL, and 19NL). Following this section designation is the length of the section in kilofeet to one decimal place.
26H88 24H88 22H88 19H88	Indicates a section of 26-guage cable 88 milihenry loading. The other gauges are listed similarly. Changes to the numbers indicate the gauge (24H88, 22H88, AND 19H88) and the loading marked as appropriate. The H indicates 6000 foot spacing between load coils; a D would represent 4500 foot spacing. The numbers following the H or D indicate the amount of inductance in milihenries.
LC	Location of a load coil. Following the LC indicator is the distance from the CO in kilofeet to one decimal place.
X	Location of a cross connect facility.
BT	Indicates that the following section is a Bridged tap. The bridged tap will be listed using the cable gauge and loading indicator above. Following the BT indicator is the length of the bridged tap section in kilofeet to one decimal place.
BOC.xxx	Indicates the location of a build out capacitor and its capacitance in microfarads.
DLC	Indicates the presence of Digital Loop Carrier (DLC). Following the DLC indicator is the type of DLC, e.g. DLC, Series 5.

6.1 Placing a UNE Service Order

Once the CLEC has received the LMU of a working TN or CKID, or received the LMU of spare facility(ies), and optionally reserved single or multiple spare pairs, the CLEC may determine if they wish to place an order for **BellSouth Unbundled Loop Modification** CLEC Information Package nd/or for a UNE Service Order (e.g. for a 2-wire ADSL compatible loop). For such a UNE Service Order, refer to **BellSouth Unbundled ADSL/HDSL Compatible Loops** CLEC Information Package.

This information referenced above is located at the BellSouth Interconnection Services Web site in the CLEC Products Section at:

http://www.interconnection.bellsouth.com/products/unes.html

7.1 Submitting LMUSI & LSR to the CRSG UNE Group

Internet Email is required to submit LMUSI and LSR Forms to the CRSG UNE Group.

The following guidelines should be followed when submitting requests to the CRSG UNE Group.

Guidelines for Interfacing with the CRSG UNE Group

- In order to serve customers as efficiently as possible for manual requests, the CLEC should communicate with the CRSG UNE Group via email, whenever possible. New orders, CLEC initiated corrections, and clarification responses should be submitted via email
- The CRSG UNE Group email address is crsg.une@bridge.bellsouth.com.
- When submitting the request via email, submit only 1 PON (SI & LSR) per mail message
- Use the following guidelines in formatting the email subject header

Email Subject Header	Purpose
PON 12345 UNE NEW	For a new UNE order
PON 12345 CORRECTION	For a CLEC initiated correction or update
PON 12345 CLARIFICATION RESPONSE	For a clarification response
PON 12345 CANCEL	For a cancellation
PON 12345 STATUS	For a status request

Every effort should be used to submit requests to the CRSG UNE Group via Internet Email. In cases of extreme circumstances when Internet Email is not available, contact the UNE Group Sales Support Manager as indicated in Section 7.6 CRSG UNE Group Escalation Procedures of this document.

7.2 Verification Performed by the CRSG UNE Group

The CRSG UNE Group verifies the following fields on the LMUSI and LSR:

Form	Fields Verified
LMUSI	CLLI, ADDRESS, # OF SPARE PAIRS
LSR	ACTL, IBAN for "C" or "N"

7.3 Reporting Status to the CLEC

The CRSG UNE Group provides CLECs with the "Open PON Status Report" on a daily basis. The purpose of the report is to provide status of the PONs open in the CRSG for processing. A PON is considered closed in the CRSG once the PON has either been FOCd by the LCSC, or, the PON has been Cancelled. Once a PON has been posted 'Closed', it will no longer appear on the Open PON Status Report.

The report is pulled once per day, after 4:00pm CST, and sent via email to the designated recipient.

The following note is attached to each report:

> "Because of the volume of PONs received, all PONs submitted for processing may not appear on this report today. However, they will appear on the report for the next business day. PONs received after 3:00pm CST will also appear on the report for the next business day. If possible, please allow two business days for PONs to appear on this report before checking the status or re-sending.
>
> If you have questions regarding a particular PON listed, please inquire according to the UNE status process."

The report shows the following information:

- CLEC NAME
- DATE RECEIVED
- END USER NAME
- STATE
- TYPE OF SERVICE
- PON NUMBER
- CLARIFICATION DATE – IN & OUT
- DATE OF SERVICE INQUIRY
- DATE SENT TO LCSC
- CANCELLATION, if applicable
- NOTES TO CLEC

7.4 To Request UNE Status

To request PON specific UNE Status, the CLEC should send an Internet Email message to the CRSG UNE Email address at:

crsg.une@bridge.bellsouth.com

The Email message header should read as follows:

PON 12345 STATUS

where '12345' represents the PON Number, e.g. PON AL987654-00 STATUS.

7.5 To Specify CLEC Recipient of Open PON Status Report

To request a change to the Email Distribution List of the Open PON Status Report, send an Internet Email message to the CRSG UNE Email mailbox as stated in 7.4 above.

The Email message header should read as follows:

CHANGE DISTRIBUTION LIST

7.6 CRSG UNE Group Escalation Procedures

The following steps should be followed to initiate escalation within the CRSG UNE Group:

First Level of Escalation	Systems Designer assigned to the order
Second Level of Escalation	Customer Care Advocate Sharon Arnold (205) 321-3306
Third Level of Escalation	Sales Support Managers Cheryl Lewis (205) 321-4607 Ruby Neely (205) 321-4621
Fourth Level of Escalation	Sales Support Director Tracey Morant (205) 321-3192

General Information:
(Page 2 is only required if CLEC is requesting more than one loop.)

Loop Makeup Service Inquiry

SI # (PON Num.)_____ Firm Order _____ Change ____ Cancel FRN_____ Cancel LMU SI____

Negotiator _____

Negotiator Telephone Number _____

CRSG EMAIL ADDRESS: (CRSG UNE/m5.mail5a)

Customer Information:

(Choose **one** of the following three choices, CLEC to indicate loop makeup type required, by telephone number CKID, spare at address copper or spare at address DLC)

_____Provide LMU at Telephone Number/CKID _____

_____Provide LMU at address listed below for spare copper pair. _____Number of spare copper pairs required (Max. 3)
_____Reserve Pair(s) in database (Y/N)?

_____Provide LMU at address listed below for spare DLC pair. _____Number of spare DLC pairs required (Max. 3)
_____ Reserve Pair(s) in database (Y/N)?

Service Address _____ CLEC Name _____

_____ CLEC Contact/Telephone number _____

_____ Local Serving Central Office CLLI _____

Outside Plant Engineering Makeup Data First Requested Pair:

Fill in Cable, pair and FRN if spares requested. Fill in FRN if reservation is requested.

Cable F1: _____ **Pair:** _____ **FRN:** _____
Cable F2: _____ **Pair:** _____
Cable F3: _____ **Pair:** _____
Cable F4: _____ **Pair:** _____

This is a loop makeup for facilities at the above cable and pair or telephone number indicated in Customer Information Section.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Comments

_____

_____

_____

Prepared by (Facility Engineer) _____ Telephone Number _____

Return to Negotiator within 2 working days. Call negotiator if any delay is expected or incurred. Revised 08-30-00

"The information contained herein is based upon BellSouth's records. This is the same information that BellSouth uses to determine loop compatibility for its own services. BellSouth cannot and does not warrant that the information contained herein is accurate in every case."

Loop Makeup Service Inquiry

SI # (PON Num.)_____ Negotiator _____

Negotiator Telephone Number _____
CRSG EMAIL ADDRESS: (CRSG UNE m5.mail5a)

Outside Plant Engineering Makeup Data Second Requested Pair:
Fill in Cable, pair and FRN if spares requested. Fill in FRN if reservation is requested.

Cable F1: _____ **Pair:** _____ **FRN:** _____
Cable F2: _____ **Pair:** _____
Cable F3: _____ **Pair:** _____
Cable F4: _____ **Pair:** _____
This is a loop makeup for facilities at the above cable and pair.

Outside Plant Engineering Makeup Data Third Requested Pair:
Fill in Cable, pair and FRN if spares requested. Fill in FRN if reservation is requested.

Cable F1: _____ **Pair:** _____ **FRN:** _____
Cable F2: _____ **Pair:** _____
Cable F3: _____ **Pair:** _____
Cable F4: _____ **Pair:** _____
This is a loop makeup for facilities at the above cable and pair.

Comments

Prepared by (Facility Engineer) _____ Telephone Number _____

Return to Negotiator within 2 working days. Call negotiator if any delay is expected or incurred. Revised 08-30-00

"The information contained herein is based upon BellSouth's records. This is the same information that BellSouth uses to determine loop compatibility for its own services. BellSouth cannot and does not warrant that the information contained herein is accurate in every case."